

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**FORM S-8**  
**REGISTRATION STATEMENT**  
*Under The Securities Act of 1933*

**CENTILLIUM COMMUNICATIONS, INC.**

(Exact name of Registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**255 Fourier Avenue**  
**Fremont, California 94539**  
(Address, including zip code, of Registrant's principal executive offices)

**94-3263530**  
(I.R.S. Employer  
Identification Number)

**1997 Stock Plan**  
**2000 Employee Stock Purchase Plan**  
(Full titles of the plans)

**Faraj Aalaei**  
**Chief Executive Officer**  
**255 Fourier Avenue**  
**Fremont, California 94539**  
**(510) 771-3700**  
(Name, address and telephone number, including area code, of agent for service)

**Copies to:**  
**David R. Lamarre, Esq.**  
**Pillsbury Winthrop Shaw Pittman LLP**  
**P.O. Box 7880**  
**San Francisco, CA 94120**  
**(415) 983-1000**

**CALCULATION OF REGISTRATION FEE**

<b>Title of Each Class of Securities to be Registered</b>	<b>Amount to be Registered (1)(2)</b>	<b>Proposed Maximum Offering Price Per Share</b>	<b>Proposed Maximum Aggregate Offering Price</b>	<b>Amount of Registration Fee</b>
Common stock, \$0.001 par value, issuable under the 1997 Stock Plan .....	2,468,838	\$ 1.935 (3)	\$ 4,777,201.53	\$146.66
Common stock, \$0.001 par value, issuable under the 2000 Employee Stock Purchase Plan .....	400,000	\$ 1.6448 (4)	\$657,920.00	\$20.20
<b>Total.....</b>	<b>2,868,838</b>	<b>N/A</b>	<b>\$ 5,435,121.53</b>	<b>\$166.86</b>

- (1) This Registration Statement shall also cover any additional shares of Common Stock which become issuable by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an increase in the number of the outstanding shares of Common Stock.
- (2) Associated with the Common Stock are Series A Participating Preferred Stock Purchase Rights that will not be exercisable or evidenced separately from the Common Stock prior to the occurrence of certain events.
- (3) With respect to the 2,468,838 shares of Common Stock to be registered under the 1997 Stock Plan, the estimated Proposed Maximum Offering Price Per Share was determined pursuant to Rule 457(h) and Rule 457(c) to be the average of the high and low price reported on the NASDAQ Global Market on April 25, 2007, which average was \$1.935 per share.

- (4) With respect to the 400,000 shares of Common Stock to be registered under the 2000 Employee Stock Purchase Plan, the estimated Proposed Maximum Offering Price Per Share was determined pursuant to Rule 457(h) and Rule 457(c) to be equal to 85% (see explanation in following sentence) of the average of the high and low price reported on the NASDAQ Global Market on April 25, 2007, which amount is equal to \$1.6448 per share. Pursuant to the Employee Stock Purchase Plan, the Purchase Price of a share of Common Stock is equal to 85% of the Fair Market Value of a share of Common Stock on the Enrollment Date or the Exercise Date (as such terms are defined in the Employee Stock Purchase Plan), whichever is lower.

**Explanatory Note:**

This Registration Statement relates to 2,468,838 and 400,000 shares of common stock of Centillum Communications, Inc. (the “Registrant”) that may be issued under the Registrant's 1997 Stock Plan and 2000 Employee Stock Purchase Plan, respectively, as a result of certain automatic annual increases in the number of authorized shares for issuance under such plans.

**INFORMATION REQUIRED PURSUANT  
TO GENERAL INSTRUCTION E TO FORM S-8****General Instruction E Information**

This Registration Statement is being filed for the purpose of increasing the number of securities of the same class as other securities for which a Registration Statement of the Registrant on Form S-8 relating to the same employee benefit plans is effective.

Registrant's Form S-8 Registration Statements filed with the Securities and Exchange Commission on October 24, 2000 (File No. 333-48534), March 6, 2001 (File No. 333-56610), March 29, 2002 (File No. 333-85236), February 18, 2003 (File No. 333-103271), March 5, 2004 (File No. 333-113318), March 11, 2005 (File No. 333-123280) and March 16, 2006 (File No. 333-132485) are hereby incorporated by reference.

**PART II****INFORMATION REQUIRED IN THE REGISTRATION STATEMENT****Item 3. Incorporation of Documents by Reference.**

There are hereby incorporated by reference into this Registration Statement the following documents and information heretofore filed with the Securities and Exchange Commission (the “Commission”) by Centillum Communications, Inc.:

1. The Registrant's Annual Report on Form 10-K for the year ended December 31, 2006, filed with the Commission on March 16, 2007;
2. The Company's Current Reports on Form 8-K filed with the Commission on January 30, 2007, February 7, 2007 (excluding the portion thereof furnished under Item 2.02 of Form 8-K) and March 7, 2007;
3. The description of Registrant's Common Stock contained in Registrant's Registration Statement on Form 8-A, filed with the Commission on May 17, 2000; and
4. The description of Registrant's Series A Participating Preferred Stock Purchase Rights contained in Registrant's Registration Statement on Form 8-A, filed with the Commission on December 31, 2002.

In addition, all documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934 (excluding any portions thereof furnished under Items 2.02 or 7.01 of Form 8-K) after the date of this Registration Statement on Form S-8 and prior to the filing of a post-effective amendment that indicates that all securities offered have been sold or which deregisters all securities then

remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing such documents.

**Item 8. Exhibits.**

<b><u>Exhibit Number</u></b>	<b><u>Exhibit</u></b>
5.1	Opinion of Pillsbury Winthrop Shaw Pittman LLP
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
23.2	Consent of Pillsbury Winthrop Shaw Pittman LLP (included in Exhibit 5.1)
24.1	Power of Attorney (see signature page)
99.1	Centillium Communications, Inc. Amended and Restated 1997 Stock Plan (previously filed as an exhibit to Registrant's Form 8-K filed with the Commission on July 26, 2006 and incorporated herein by reference)
99.2	Centillium Communications, Inc. 2000 Employee Stock Purchase Plan (previously filed as an exhibit to Registrant's Form S-8 filed with the Commission on March 6, 2001 and incorporated herein by reference)

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Fremont, State of California, on the second day of May, 2007.

Centillium Communications, Inc.

By: /s/ Faraj Aalaei

Faraj Aalaei

Chief Executive Officer

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each such person whose signature appears below constitutes and appoints, jointly and severally, Faraj Aalaei and Linda C. Reddick his true and lawful attorneys-in-fact, each with full power of substitution, for him in any and all capacities, to sign any amendments to this Registration Statement on Form S-8 (including post-effective amendments), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Commission, granting unto said attorneys-in-fact, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Kamran Elahian</u> Kamran Elahian	Chairman of the Board	May 2, 2007
<u>/s/ Faraj Aalaei</u> Faraj Aalaei	Chief Executive Officer and Director (Principal Executive Officer)	May 2, 2007
<u>/s/ Linda C. Reddick</u> Linda C. Reddick	Interim Chief Financial Officer (Principal Financial and Accounting Officer)	May 2, 2007
<u>/s/ Jere Drummond</u> Jere Drummond	Director	May 2, 2007
<u>/s/ Sam Srinivasan</u> Sam Srinivasan	Director	May 2, 2007
<u>/s/ Robert C. Hawk</u> Robert C. Hawk	Director	May 2, 2007

## INDEX TO EXHIBITS

<b><u>Exhibit Number</u></b>	<b><u>Exhibit</u></b>
5.1	Opinion of Pillsbury Winthrop Shaw Pittman LLP
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
23.2	Consent of Pillsbury Winthrop Shaw Pittman LLP (included in Exhibit 5.1)
24.1	Power of Attorney (see signature page)
99.1	Centillum Communications, Inc. Amended and Restated 1997 Stock Plan (previously filed as an exhibit to Registrant's Form 8-K filed with the Commission on July 26, 2006 and incorporated herein by reference)
99.2	Centillum Communications, Inc. 2000 Employee Stock Purchase Plan (previously filed as an exhibit to Registrant's Form S-8 filed with the Commission on March 6, 2001 and incorporated herein by reference)